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UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF ENTOMOLOGY

FOREST INSECT INVESTIGATIONS

Summary of Control Work from

REPORT ON THE INSECT CONTROL PROJECT

IN WESTERN YELLOW PINE

COLORADO NATIONAL FOREST, 1927 and 1928

by

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Fort Collins, Colorado
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SUMMARY OF CONTROL WORK
Spring 1928

Man Days	No. Trees Treated	Average Trees per Man Day	Average Cost per Tree
1027.50	4634	4.5	$1.44
	Spring 1927		
1963.75	8745	4.4	1.51
	Fall 1927		
701	2713	3.9	1.81
	Total 1927-28		
3692.25	16,092	4.36	1.53

Size of Trees Treated

The average size of trees treated remained almost the same for the three projects. The following shows the average size:

Project	No. Trees	Average d.b.h. Inches	Average Length Treated - Feet *
Spring 1927	8745	11.0	22
Fall 1927	2713	11.6	22
Spring 1928	4634	12.0	23

BOARD FOOT CONTENT

In using the average-sized tree to get the volume of the timber treated it is not as accurate as an actual computation and summary of the data in the spotters' notebooks. This method is not justified and it is felt that the average tree's d.b.h. gives an underestimate of the actual volume cut but is close enough for statistical purposes.

Basis 100 Board Feet per Tree

Project	Volume Feet per M
Spring 1927	863,200
Fall 1927	271,000
Spring 1928	463,400

Total volume cut--1,597,600 ft b.m.

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3 cop. of photos recd from Coles 7. 12/13/28

Area Covered 1928

The 1928 control project covered a much greater acreage than the 1927 spring work. In places, as the Big Thompson River drainage, there was a certain amount of overlap in picking up scattered trees on areas covered during 1927.

Practically all parts of the western yellow pine type on the Forest were covered in some degree during the spring 1928 campaign. The attached map shows the areas graphically by years.

Acreage figures mean little except to show the extent of the project. The gross acreage for the three projects is as follows:

Project	Acres
Spring 1927	32,000
Fall 1927	45,000
Spring 1928	99,000

Cooperation

This year private owners of timbered land were more enthusiastic about cooperating with the Government in controlling the Black Hills beetle than in previous operations. This was especially true where any recreational values were noticeable. Beside three owners who paid the Forest Service the cost of treating infested trees on their land, probably 25 or 30 owners treated trees on patented land with their own help and funds. This required a small amount of time by the spotters and local Forest officers in getting the private owners of infected timber lined up.

These private owners and small sawlog and prop operators treated or disposed of approximately 500 trees in addition to those treated by the Forest Service crews.

Another phase of cooperation affecting the project was the work undertaken by the Rocky Mountain National Park. Close contact and cooperation with the Park Service project were maintained at all times.

No definite word as to the number of trees treated by the Park Service has been received, but they treated approximately 800 infected trees this spring.

All this work, together with the Forest Service project, has resulted in a fairly systematic clean-up of the centers of infestation in this region.

Roughly, between 5900 to 6000 infected trees were treated by all interests this spring, and with the 2713 treated in last fall's operation a total of approximately 8700 infected trees were treated of the 1927 attack.

FINANCIAL STATEMENT

Funds Available

Insect Control Funds January 1, 1928		$6908.28
Cooperative Work Funds		
Mr. Waddell	8.00	
Mrs. A.W. Scott	8.00	
Dr. Maitland	88.20	104.20

Total Available	$7012.48
Decrease June 12 1928 in Insect Control Funds	287.73
Total Available Funds	$6724.75

Expenditures

General Supervision		
Salary - - - - - - -	$433.32	
Travel Exp. - - - -	136.86	
Gas,Oil,Gov.Truck-	51.25	
Total- - -	$621.43	
Crew Supervision and Spotting		
Wages and Subsist.	$1436.76	
Labor and Subsistence		
Wages - - - - - - -	$3116.50	
Subsistence- - - -	1265.79	$4382.29
Supplies and Equipment		
Gov. Truck&Tires(4)	24.96	
Overhauling- - - -	42.47	
Tents - - - - - - - -	36.75	
Miscellaneous- - -	47.39	151.57
Hauling		
Transp.of Laborers, camp equipment &c.	102.00	$6694.05

Balance on hand June30 - - - - - - -$30.70

Thiswas shown as surplus on the June 30 Form 44.

Costs on a Tree Basis

Item		Cost per Tree
General Supervision	$621.43	$0.132
Crew Supervision and Spotting	1436.76	0.310
Labor	3116.50	0.673
Subsistence	1265.79	0.274
Supplies and Equipment	151.57	0.033
Hauling	102.00	0.022
Total cost per tree		$1.444.

Total cost $6694.05
" trees treated 4634.
Average cost per tree $1.444

The above includes 50 trees treated by Government crews for private owners at a cost of $104.20, covering approximately 640 acres.

SUMMARY FOR ENTIRE PROJECT

Cost per Tree

Item	Project		
	1927		1928
	Spring	Fall	Spring
Examination	$0.018	$0.021	$0.
General Supervision	0.073	0.154	0.132
Crew Supervision and Spotting	0.259	0.527	0.310
Labor	0.746	0.837	0.673
Subsistence	0.268	0.226	0.274
Supplies and Equipment	0.100	0.022	0.033
Transportation	0.036	0.021	0.022
Miscellaneous	0.008	0.	0.
Average Cost per Tree	$1.508	$1.808	$1.444

Labor

One of the reasons for the spring work of 1928 costing less per tree, though the average d.b.h. and length were slightly increased over the previous projects, was that most of the men employed had experience in 1927. Another reason was that very little equipment had to be purchased since that used in 1927 was available. The outstanding feature was the type of temporary help available. There were some very dependable and capable men on the job. Plenty of labor was available at the time of starting the project and this situation gave the Forest Examiner in charge an opportunity to select the type of men best suited for the work.

A laborer received $3 per day and board. Half of the men employed furnished their own board and $1 per day additional was paid in lieu of subsistence.

Government-subsisted camps served 1014 men meals at a cost of 29¢ each or 87¢ per man day. No cooks were furnished, the men acting as their own cooks.

--from Report on the Insect Control Project in Western Yellow Pine, Colorado National Forest, 1927 and 1928, by Arthur L. Nelson.

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